IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS

UNITED STATES OF AMERICA,)
Plaintiff,)
v.) No. 4:13-cv-2009
SHELL OIL COMPANY, DEER PARK REFINING LIMITED PARTNERSHIP, and SHELL CHEMICAL LP,))))
Defendants.))
)

COMPLAINT

The United States of America ("United States"), by the authority of the Attorney General and through the undersigned attorneys, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), files this Complaint and alleges as follows:

NATURE OF ACTION

1. This is a civil action against Shell Oil Company, Deer Park Refining Limited Partnership, and Shell Chemical LP (collectively "SDP" or "Defendants"), pursuant to the following statutory provisions: Sections 113(b) and 167 of the Clean Air Act ("CAA"), 42 U.S.C. §§ 7413(b) and 7477; Sections 109(c) and 113(b) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §§ 9609(c)

and 9613(b); and Section 325(b)(3) of the Emergency Planning and Community Right-To-Know Act ("EPCRA"), 42 U.S.C. § 11045(b)(3).

- 2. This Complaint is for civil penalties and injunctive relief based on alleged violations at the SDP chemical plant and petroleum refinery located in Deer Park, Texas (the "Chemical Plant" and "Refinery" respectively). The claims in this Complaint are in regard to twelve flares. Seven of the flares are located at the Refinery: the CCU, Coker, East Property, Ethylene (aka Girbotol), North Property, South Property, and West Property (collectively "Refinery Flares"). Five of the flares are located at the Chemical Plant: A&S, HIPA, Olefins II, Olefins III, and Olefins Ground (collectively "Chemical Plant Flares").
- 3. On information and belief, the United States alleges that, at SDP's Refinery and/or Chemical Plant, SDP has violated and/or continues to violate the following statutory and regulatory requirements:
 - a. The Prevention of Significant Deterioration ("PSD") requirements found in 42 U.S.C. § 7475 and 40 C.F.R. §§ 52.21(a)(2)(iii) and 52.21(j)–52.21(r)(5);
 - b. The Non-Attainment New Source Review ("Non-Attainment NSR") requirements found in 42 U.S.C. §§ 7502(c)(5), 7503(a)–(c) and 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1–4;
 - c. The federally enforceable Minor New Source Review ("Minor NSR") requirements adopted and implemented by Texas in its State Implementation Plan ("SIP") pursuant to 42 U.S.C. § 7410(a)(2)(C) and 40 C.F.R. §§ 51.160–51.164;
 - d. The New Source Performance Standards ("NSPS") promulgated at 40 C.F.R. Part 60, Subparts A, J, VV, VVa, GGG, and GGGa pursuant to Section 111 of the CAA, 42 U.S.C. § 7411;
 - e. The National Emission Standards for Hazardous Air Pollutants ("NESHAPs") for Benzene Waste Operations promulgated at 40 C.F.R. Part 61, Subpart FF, pursuant to Section 112 of the CAA, 42 U.S.C. § 7412;

- f. The NESHAPs for Source Categories promulgated at 40 C.F.R. Part 63, Subparts A, G, CC, and UUU, pursuant to Section 112 of the CAA, 42 U.S.C. § 7412;
- g. The requirements of Title V of the CAA found at 42 U.S.C. §§ 7661a(a), 7661b(c), 7661c(a), and the regulations promulgated thereunder at 40 C.F.R. §§ 70.1(b), 70.5(a) and (b), 70.6(a) and (c), and 70.7(b);
- h. The portions of the Title V permits for SDP's Chemical Plant and/or Refinery that adopt, incorporate, or implement the provisions cited in Subparagraphs 3.a–3.f and 3.i–3.j;
- i. The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements the federal requirements set forth in Subparagraphs 3.a–3.b and 3.d–3.g;
- j. Additional, federally enforceable Texas SIP regulations, as identified in Claim 10 of this Complaint; and
- k. The emergency notification requirements of CERCLA, 42 U.S.C. § 9603(a), and EPCRA, 42 U.S.C. § 11004(b).

JURISDICTION AND VENUE

- 4. This Court has jurisdiction over the subject matter pursuant to 28 U.S.C. §§ 1331, 1345, and 1355; Sections 113(b) and 167 of the CAA, 42 U.S.C. §§ 7413(b) and 7477; Sections 109 of CERCLA, 42 U.S.C. § 9609(c); and Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3). This Court has personal jurisdiction over SDP, which does business in the State of Texas and in this judicial district.
- 5. Venue is proper in this District pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b); 28 U.S.C. §§ 1391(b) and (c) and 1395(a); Section 113(b) of CERCLA, 42 U.S.C. § 9613(b); and Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3), because the alleged violations in this Complaint occurred and are occurring at the Shell Chemical Plant and Refinery which are located in this District. Each defendant has consented to venue in this District.

NOTICE

6. Notice of the commencement of this action was given to Texas at least thirty (30) days prior to the filing of this complaint under Sections 113(a)(1) and 113(b) of the CAA, 42 U.S.C. §§ 7413(a)(1) and (b).

AUTHORITY

7. The United States Department of Justice has authority to bring this action on behalf of EPA under, *inter alia*, 28 U.S.C. §§ 516 and 519 and, for the CAA claims, also under Section 305(a) of the CAA, 42 U.S.C. § 7605(a).

DEFENDANTS

- 8. Defendant Shell Oil Company ("Shell Oil") is a Delaware corporation that is an operator of the Refinery. At all times pertinent to this suit, Shell Oil was an operator of each unit at the Refinery that is the subject of the claims for relief in this Complaint.
- 9. Defendant Deer Park Refining Limited Partnership ("Deer Park Refining") is a Delaware-registered business entity that owns the Refinery. At all times pertinent to this suit, Deer Park Refining was the owner of each unit of the Refinery that is the subject of the claims for relief in this Complaint. Shell Oil is a general partner of Deer Park Refining.
- 10. Defendant Shell Chemical LP ("Shell Chemical") is a Delaware-registered business entity that owns and operates the Chemical Plant. At all times pertinent to this suit, Shell Chemical was an owner and operator of each unit of the Chemical Plant that is the subject of the claims for relief in this Complaint. Shell Oil is a general partner of Shell Chemical.
- 11. Shell Oil, Deer Park Refining, and Shell Chemical each is a "person" within the meaning of Sections 113(b) and 302(e) of the CAA, 42 U.S.C. §§ 7413(b) and 7602(e);

Section 103(a) of CERCLA, 42 U.S.C. § 9603(a); Section 329(7) of EPCRA, 42 U.S.C. § 11049(7); and applicable federal and state regulations promulgated pursuant to these statutes.

CLEAN AIR ACT

I. CAA STATUTORY AND REGULATORY BACKGROUND

12. The Clean Air Act establishes a regulatory scheme designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. 42 U.S.C. § 7401(b)(1).

A. NATIONAL AMBIENT AIR QUALITY STANDARDS

1. General

- 13. Section 108(a) of the CAA, 42 U.S.C. § 7408(a), requires EPA to list, and issue air quality criteria for, each air pollutant, the emissions of which may endanger public health or welfare and the presence of which results from numerous or diverse mobile or stationary sources.
- 14. Section 109(a) of the CAA, 42 U.S.C. § 7409, requires EPA to promulgate regulations establishing primary and secondary national ambient air quality standards ("NAAQS") for those air pollutants for which air quality criteria have been issued pursuant to Section 108 of the CAA. Under Section 109(b) of the CAA, 42 U.S.C. § 7409(b), the primary NAAQS are to be adequate to protect the public health with an adequate margin of safety, and the secondary NAAQS are to be adequate to protect the public welfare from any known or anticipated adverse effects associated with the presence of the air pollutant in the ambient air.
- 15. Pursuant to Sections 108 and 109 of the CAA, 42 U.S.C. §§ 7408 and 7409, EPA has listed and issued air quality criteria and NAAQS for, *inter alia*, sulfur dioxide ("SO₂"), carbon monoxide ("CO"), and ozone. The NAAQS for these pollutants are set forth in 40 C.F.R. Part 50.

16. Pursuant to Section 107(d) of the CAA, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is deemed an "attainment" area. An area that does not meet the NAAQS for a particular pollutant is deemed a "non-attainment" area. An area that cannot be classified due to insufficient data is deemed "unclassifiable." Air quality designations for states are approved by EPA and can be found at 40 C.F.R. Part 81.

2. <u>State Implementation Plans</u>

- 17. Section 110 of the CAA, 42 U.S.C. § 7410, requires each State to adopt and submit to EPA for approval a plan that provides for the attainment and maintenance of the NAAQS in each air quality control region within each state. This plan is known as a State Implementation Plan ("SIP").
- 18. Pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, states adopt and submit to EPA for approval various rules for the attainment and maintenance of the NAAQS. After such provisions are approved by EPA, these provisions constitute a state's "applicable implementation plan," within the meaning of Sections 113(b) and 302(q) of the CAA, 42 U.S.C. §§ 7413(b) and 7602(q), and are considered the State Implementation Plan ("SIP"). These SIPs are enforceable by the respective states in which they are adopted and, pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), by the United States.
- 19. Of relevance to this Complaint, Section 110(a)(2)(C) of the CAA, 42 U.S.C. § 7410(a)(2)(C), requires each State Implementation Plan to include, *inter alia*, "regulation of the modification and construction of any stationary source within the areas covered by the plan as

necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter [Subchapter I of the CAA]."

3. Prevention of Significant Deterioration ("PSD") Requirements

a. PSD Program in General

- 20. Part C of Subchapter I of the CAA, 42 U.S.C. §§ 7470–7492, sets forth requirements for the prevention of significant deterioration of air quality in those areas designated as either attainment or unclassifiable for purposes of complying with the NAAQS. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. 42 U.S.C. § 7470. These provisions are referred to herein as the "PSD program."
- 21. The core of the PSD program is that "[n]o major emitting facility . . . may be constructed in any [attainment or unclassifiable] area" unless various requirements are met. 42 U.S.C. § 7475(a). These requirements include obtaining a PSD permit with emission limitations that conform to the CAA, demonstrating that emissions will not contribute to a NAAQS violation, and applying "best available control technology" ("BACT") to control emissions. *Id*.
- 22. Section 169(1) of the CAA, 42 U.S.C. § 7479(1), designates petroleum refineries and chemical process plants which emit or have the potential to emit one hundred tons per year or more of any pollutant to be a "major emitting facility."

23. EPA promulgated regulations to implement the PSD program. These regulations are found at 40 C.F.R. § 52.21 and are referred to as the "PSD regulations."

b. PSD Program in Texas

- 24. In addition to the requirement found in Section 110(a)(2)(c) of the CAA, 42 U.S.C. § 7410(a)(2)(C), Section 161 of the CAA, 42 U.S.C. § 7471, also requires that each State Implementation Plan contain a PSD program. A state may comply with Section 161 by having EPA delegate authority to enforce the federal PSD regulations set forth at 40 C.F.R. § 52.21, or by having its own PSD regulations approved by EPA as part of its SIP. For an "approved" program, the state requirements must be at least as stringent as the requirements set forth at 40 C.F.R. § 51.166.
- 25. Texas has an approved PSD program. 30 Tex. Admin. Code §§ 116.160–116.163 (approved at 62 Fed. Reg. 44,087, Aug. 19, 1997). Texas is authorized to issue and enforce PSD permits. In all respects relevant to this Complaint, the PSD regulations of Texas that are applicable to this action closely mirror the federal PSD regulations codified at 40 C.F.R. § 52.21.

c. Requirements of the Applicable PSD Regulations

26. Under the PSD regulations relevant to the allegations in this Complaint, "[n]o new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section [40 C.F.R. § 52.21] apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements." 40 C.F.R. § 52.21(a)(2)(iii). With certain exceptions not applicable here, the requirements of paragraphs (j) through (r)(5) "apply to the construction of any new major stationary source or the major modification of any existing major stationary source." 50 C.F.R. § 52.21(a)(2)(ii).

- 27. "Major modification" is defined as "any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section) and a significant net emissions increase of that pollutant from the major stationary source." 40 C.F.R. § 52.21(b)(2)(i).
- 28. "Significant emissions increase" means "for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant." 40 C.F.R. § 52.21(b)(40).
- 29. "Regulated NSR Pollutant" means, *inter alia*, sulfur dioxide ("SO₂"), volatile organic compounds ("VOCs"), carbon monoxide ("CO"), and hydrogen sulfide ("H₂S").

 40 C.F.R. § 52.21(b)(50).
 - 30. "Significant" means the following amounts for the following pollutants:

SO₂ 40 tons per year ("TPY") VOC 40 TPY

CO 100 TPY H_2S 10 TPY

40 C.F.R. § 52.21(b)(23).

31. "Net emissions increase" means "with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero: (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and (b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable." 40 C.F.R. § 52.21(b)(3)(i).

32. If a new major stationary source or major modification triggers the requirements of the PSD Program, the owner and/or operator, *inter alia*, must install and operate the best available control technology ("BACT") (as that term is defined at 42 U.S.C. § 7479(3) and 40 C.F.R. § 52.21(b)(12)) at the facility for each pollutant that will have a significant net emissions increase, conduct air quality modeling, and analyze and demonstrate that the construction or modification, taken together with other increases or decreases of air emissions, will not violate applicable air quality standards. 42 U.S.C. § 7475(a); 40 C.F.R. §§ 52.21(j)—(r)(5).

4. NonAttainment New Source Review ("NSR") Requirements

a. <u>Nonattainment New Source Review Program in General</u>

- 33. Part D of Subchapter I of the CAA, 42 U.S.C. §§ 7501-7515, sets forth provisions relating to what are commonly referred to as "New Source Review" requirements applicable to nonattainment areas ("Nonattainment NSR"). The Nonattainment NSR program is intended, *inter alia*, to reduce emissions of air pollutants in areas that have not attained the NAAQS.
- 34. Part D directs states to include in their SIPs requirements to provide for reasonable progress towards attainment of the NAAQS in nonattainment areas. 42 U.S.C. § 7502(c)(2).
- 35. Part D at Section 172(c)(5) of the CAA, 42 U.S.C. § 7502(c)(5), describes the core of the Nonattainment NSR Program. Under Section 172(c)(5), all state SIPs must require permits for the construction and operation of new or modified major stationary sources anywhere in a nonattainment area within the state. These Nonattainment NSR permits must be issued in accordance with Section 173 of the CAA, 42 U.S.C. § 7503.

36. EPA has promulgated regulations that prescribe the elements that all state SIPs must include in their Nonattainment NSR permit programs. 40 C.F.R. § 51.165. EPA also has issued an "Interpretative Ruling" that clarifies the requirements necessary for the approval of any permit in a nonattainment area. 40 C.F.R. Part 51, Appendix S, Part IV.

b. Nonattainment NSR Program in Texas

- 37. A state may comply with Sections 172 and 173 of the CAA by having its Nonattainment NSR regulations approved by EPA as part of its SIP. These provisions must be at least as stringent as those set forth at 40 C.F.R. § 51.165 and must comply with 40 C.F.R. Part 51, Appendix S, Part IV.
- 38. Texas has an approved Nonattainment NSR permit program. 30 Tex. Admin. Code §§ 116.150–116.151 (approved at 65 Fed. Reg. 43,986, July 17, 2000). Texas is authorized to issue and enforce Nonattainment NSR permits. In all respects relevant to this Complaint, the Nonattainment NSR permit programs of Texas that are applicable to this action closely mirror the federal regulations codified at 40 C.F.R. § 51.165 and 40 C.F.R. Part 51, Subpart S, Part IV.

c. Requirements of Applicable Nonattainment NSR Programs

- 39. Under the Nonattainment NSR requirements relevant to the allegations in this Complaint, no new major stationary source or major modification may be issued a permit to construct unless certain requirements are met. 40 C.F.R. Part 51, Appendix S, Section IV.A.
- 40. "Major stationary source" includes, *inter alia*, any stationary source that has the potential to emit 100 TPY or more of any regulated NSR pollutant. 40 C.F.R. \$ 51.165(a)(1)(iv)(A).

- 41. For purposes of this Complaint, "major modification" and the following terms used within that definition—"significant emissions increase," "significant," and "net emissions increase"—have the same meanings as those set forth in Paragraphs 27–28 and 30–31, except that, under the Nonattainment NSR program, there is no "significance" level for H₂S. 40 C.F.R. § 51.165(a)(1)(x)(A). H₂S is not a "regulated NSR pollutant" for purposes of the Nonattainment NSR program. 40 C.F.R. § 51.165(a)(1)(xxxvii).
- 42. If a new major stationary source or major modification triggers the requirements of the Nonattainment NSR program, the owner and/or operator must obtain a Nonattainment NSR permit that among other things: (a) secures federally enforceable emission offsets that are at least as great as the new or modified source's emissions; (b) installs and operates the lowest achievable emission rate ("LAER") as defined in Section 171(3) of the CAA, 42 U.S.C. § 7501(3); and (c) analyzes alternative sites, sizes, production processes, and environmental control techniques for the proposed source and demonstrate that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification. 42 U.S.C. §§ 7503(a)–(c); 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1–4.

5. Minor New Source Review ("Minor NSR") Requirements

a. <u>Minor NSR Program in General</u>

43. EPA has promulgated regulations that prescribe the elements that all state SIPs must include in the review of new sources and modifications, including modifications that do not trigger the requirements of the PSD or Nonattainment NSR programs. 40 C.F.R. §§ 51.160–51.164.

- 44. Each SIP must set forth legally enforceable procedures that enable States to determine whether construction or modification will result in: "(1) A violation of applicable portions of the control strategy [for the State]; or (2) Interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State." 40 C.F.R. § 51.160(a).
- 45. The procedures in the SIP must include, *inter alia*, the means by which the State will prevent construction or modification if: "(1) It will result in a violation of applicable portions of the control strategy; or (2) It will interfere with the attainment or maintenance of a national standard." 40 C.F.R. § 51.160(b). The procedures must also provide for, *inter alia*, the submission by owners of information regarding the nature and amount of emissions to be emitted and the location, design, construction, and operation of the facility, building, structure, or installation as may be necessary to permit the State to determine whether there will be a violation of the State's control strategy or an interference with a national standard. 40 C.F.R. § 51.160(c).
- 46. Each State's SIP, therefore, must include permitting requirements for not just new "major stationary sources" and "major modifications"—which fall under PSD and Nonattainment NSR regulations—but also for any construction or modification of a stationary source. These SIP provisions generally are referred to as Minor New Source Review ("Minor NSR") programs.

b. <u>Minor NSR Program in Texas</u>

47. Texas has an approved Minor NSR permit program. 30 Tex. Admin. Code 116, Subpart B (approved at 60 Fed. Reg. 49,788, Sept. 27, 1995). Texas is authorized to issue and enforce Minor NSR permits.

- 48. In general, under the Texas Minor NSR regulations relevant to the allegations in this Complaint, a source must obtain a permit to construct (install) any new or modified source. *See* 30 Tex. Admin. Code §116.110 (approved 68 Fed. Reg. 64,543, November 14, 2003).
- 49. Except where the requirements of the PSD and/or Nonattainment NSR programs apply, or unless an exemption under the Texas Minor NSR rules applies, it is unlawful to operate a new or modified source without a Minor NSR permit. *See*, 30 Tex. Admin. Code §116.110. (approved 68 Fed. Reg. 64,543, November 14, 2003).

B. NEW SOURCE PERFORMANCE STANDARDS

1. General

- 50. Section 111(b)(1)(A) of the CAA, 42 U.S.C. § 7411(b)(1)(A), requires EPA to publish and periodically revise a list of categories of stationary sources including those categories that, in EPA's judgment, cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.
- 51. Once a category is included on the list, Section 111(b)(1)(B) of the CAA, 42 U.S.C. §7411(b)(1)(B), requires EPA to promulgate a federal standard of performance for new sources within the category, also known as a New Source Performance Standard ("NSPS"). Section 111(e) of the CAA, 42 U.S.C. § 7411(e), prohibits an owner or operator of a new source from operating that source in violation of an NSPS after the effective date of the NSPS applicable to such source.
- 52. "New source" is defined as any stationary source, the construction or modification of which is commenced after the publication of the NSPS regulations or proposed NSPS regulations applicable to such sources. 42 U.S.C. § 7411(a)(2). "Stationary source" is defined as

a building, structure, facility, or installation which emits or may emit any air pollutant. 42 U.S.C. § 7411(a)(3).

53. The New Source Performance Standards are located in Part 60 of Title 40 of the Code of Federal Regulations.

2. Part 60, Subpart A: General

- 54. Pursuant to Section 111(b)(1)(B) of the CAA, 42 U.S.C. § 7411(b)(1)(B), EPA promulgated regulations that contain general provisions applicable to all NSPS sources.

 40 C.F.R. Part 60, Subpart A, §§ 60.1- 60.19 ("Subpart A").
- 55. Under Subpart A, the provisions of 40 C.F.R. Part 60 "apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the publication [in Part 60] of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility." 40 C.F.R. § 60.1.
- 56. "Affected facility" is defined as "any apparatus to which a standard is applicable." 40 C.F.R. § 60.2.

3. Part 60, Subpart A: 40 C.F.R. § 60.11(d)

57. Within Subpart A, EPA promulgated a regulation that applies at all times to all affected facilities, including associated air pollution control equipment. Specifically, at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. 40 C.F.R. § 60.11(d).

4. Part 60, Subpart A: 40 C.F.R. § 60.18 (Requirements related to Flares Used as Control Devices)

- 58. Within Subpart A, EPA promulgated specific regulations that apply whenever flares are used as control devices. 40 C.F.R. §§ 60.18(b)–(f).
- 59. Of relevance to this complaint are the following requirements: flares shall be designed and operated with no visible emissions, 40 C.F.R. § 60.18(c)(1); flares shall be operated with a flame present at all times, 40 C.F.R. § 60.18(c)(2); for steam-assisted flares, the net heating value of the gas being combusted must be 300 British Thermal Units ("BTU") per standard cubic foot ("scf") or greater, 40 C.F.R. § 60.18(c)(3)(ii); for steam-assisted flares, certain exit velocity requirements must be met, 40 C.F.R. § 60.18(c)(4); for all flares, the owner or operator must monitor the flare to ensure that it is operated and maintained in conformance with its design, 40 C.F.R. § 60.18(d); and a flare must be operated at all times when emissions are vented to it. 40 C.F.R. § 60.18(e).

5. Specific NSPS Standards: Part 60, Subparts J, VV, VVa, GGG, and GGGa

60. Pursuant to Section 111(b)(1)(A) of the CAA, 42 U.S.C. § 7411(b)(1)(A), EPA has identified, *inter alia*, the following as categories of stationary sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to endanger public health or welfare and EPA has promulgated regulations in the following Subparts of Part 60 of Title 40 of the Code of Federal Regulations to regulate those categories:

CATEGORY	REGULATION (40 C.F.R. Part 60)
Petroleum Refineries	Subpart J
	40 C.F.R. §§ 60.100 et seq.
Equipment Leaks of VOC in Petroleum Refineries (between Jan. 4, 1983, and Nov. 7, 2006)	Subpart GGG 40 C.F.R. §§ 60.590–60.593
Equipment Leaks of VOC in Petroleum	Subpart GGGa
Refineries (after Nov. 7, 2006)	40 C.F.R. §§ 60.590a–60.593a
Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (between Jan. 5, 1981, and Nov. 7, 2006)	Subpart VV 40 C.F.R. §§ 60.480–60.489
Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (after Nov. 7, 2006)	Subpart VVa 40 C.F.R. §§ 60.480a–60.489a

- 61. Of relevance to this complaint, one of the "affected facilities" that Subpart J applies to is a "fuel gas combustion device," 40 C.F.R. § 60.100(a), including a flare, 40 C.F.R. § 60.101(g), which commenced construction, reconstruction, or modification after June 11, 1973.
- 62. Under Subpart J, an owner or operator of a flare that is an affected facility is prohibited from burning any fuel gas in the flare that contains H₂S in excess of 230 milligrams per dry standard cubic meter (approximately 161 ppm), unless certain exceptions apply. 40 C.F.R. § 60.104(a)(1).
- 63. Under Subpart J, an owner or operator of a flare that is an affected facility is required to install, calibrate, operate, and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in the fuel gases before being burned in any flare. 40 C.F.R. § 60.105(a)(4).
- 64. Of relevance to this complaint, the affected facilities that Subparts GGG and GGGa apply to are compressors and all "equipment" within a process unit at a petroleum refinery. 40 C.F.R. §§ 60.590(a), 60.590a(a). "Equipment" means each valve, pump, pressure

relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service. 40 C.F.R. §§ 60.591, 60.591a.

- 65. In all respects relevant to this complaint, each owner or operator of a petroleum refinery that is subject to the requirements of Subparts GGG and GGGa is required to comply with the standards of Subparts VV and VVa, respectively. 40 C.F.R. §§ 60.592, 60.592a.
- 66. Of relevance to this complaint, the affected facilities that Subparts VV and VVa apply to are all "equipment" within a process unit at a synthetic organic chemicals manufacturing facility. 40 C.F.R. §§ 60.480(a)(2), 60.480a(a)(2). "Equipment" means each pump, compressor, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service. 40 C.F.R. §§ 60.481, 60.481a.
- 67. Under Subparts VV and VVa—and therefore, under GGG and GGGa—each owner or operator who uses a flare as a control device to comply with the requirements of Subparts VV and VVa must also comply with the requirements of 40 C.F.R. § 60.18. 40 C.F.R. § 60.482-10(d); 60.482-10a(d).
- 68. Under Subparts VV and VVa—and therefore, under GGG and GGGa—each owner or operator of any control device used to comply with the requirements of Subparts VV and VVa must monitor the control device to ensure that it is operated and maintained in conformance with its design. 40 C.F.R. §§ 60.482-10(e); 60.482-10a(e).

C. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

1. General: Section 112 prior to the 1990 CAA Amendments

- 69. Section 112 of the Clean Air Act sets forth a national program for the control of hazardous air pollutants ("HAPs"). 42 U.S.C. § 7412. As originally promulgated in the Clean Air Act Amendments of 1970, Section 112 directed EPA to publish a list of HAPs. A HAP was defined as "an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the Administrator may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." 42 U.S.C. § 1857c-7 (1971). At that time, Congress directed EPA to establish HAP standards that provided "an ample margin of safety to protect the public health from such hazardous air pollutant." *Id*.
- 70. Between 1970 and 1990, EPA listed eight substances as hazardous air pollutants and promulgated emission standards for seven of them. H.R. Rep. No. 101-490, 101st Cong., 2d Sess., pt 1 at 151 (1990).

2. Part 61, Subpart A: General

- 71. Pursuant to Section 112 of the CAA, 42 U.S.C. § 7412, as it existed prior to the 1990 Amendments, EPA promulgated regulations that contain general provisions applicable to all sources that are subject to the NESHAPs found in Part 61 of Title 40 of the Code of Federal Regulations. 40 C.F.R. Part 61, Subpart A, §§ 61.01–61.19 ("Subpart A").
- 72. Under Subpart A, the provisions of 40 C.F.R. Part 61 "apply to the owner or operator of any stationary source for which a standard is prescribed under this part." 40 C.F.R. § 61.1(c).

3. Part 61, Subpart A: 40 C.F.R. § 61.12(c)

73. Within Subpart A of Part 61, EPA promulgated a requirement that corresponds to the "good air pollution control practices" requirement of Subpart A of the NSPS (*i.e.*, 40 C.F.R. § 60.11(d)). Specifically, "the owner and operator of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practices for minimizing emissions." 40 C.F.R. § 61.12(c).

4. Part 61 FF: 40 C.F.R. §§ 61.340-61.359

- 74. Pursuant to Section 112 as it existed prior to the CAA Amendments of 1990, EPA listed benzene as a hazardous air pollutant and promulgated standards related to the control of benzene in waste operations. 55 F.R. 8292 (March 7, 1990). Thereafter, in 1993, EPA finalized the regulations, 58 F.R. 3072 (January 7, 1993), and published them at 40 C.F.R. Part 61, Subpart FF. 40 C.F.R. §§ 61.340-61.359. These regulations commonly are referred to as the "Benzene Waste Operations NESHAP" or "Subpart FF.
- 75. Subpart FF applies, *inter alia*, to petroleum refineries and chemical manufacturing plants. 40 C.F.R. § 61.340(a).
- 76. Under Subpart FF, a closed vent system is defined as "a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission source to a control device." 40 C.F.R. § 61.341.
- 77. Under Subpart FF, a "control device" is defined as an enclosed combustion device, vapor recovery system, or flare. 40 C.F.R. § 61.341.

- 78. Flares used as control devices for closed vent systems subject to Subpart FF must comply with the requirements of 40 C.F.R. § 60.18. 40 C.F.R. § 61.349(a)(2)(iii).
- 79. Flares used as control devices for closed vent systems subject to Subpart FF must also comply with the General Provisions of Part 61, including the requirement that the air pollution control equipment be maintained and operated "in a manner consistent with good air pollution control practice for minimizing emissions." 40 C.F.R. § 61.12.

5. General: Section 112 after the 1990 CAA Amendments

- 80. Through the Clean Air Act Amendments of 1990, Congress replaced the then-existing Section 112 and established a new program for the control of HAPs. H.R. Rep. No. 101-490, 101st Cong., 2d Sess., pt 1 at 324 (1990). The regulations then in existence under the original Section 112 (such as the Benzene Waste Operations NESHAP at 40 C.F.R. Part 61, Subpart FF described above) remained in full force and effect.
- 81. With the 1990 amendments, Congress itself established a list of 188 hazardous air pollutants believed to cause adverse health or environmental effects. 42 U.S.C. § 7412(b)(1).
- 82. Congress directed EPA to publish a list of all categories and subcategories of, *inter alia*, major sources of HAPs. 42 U.S.C. § 7412(c).
- 83. "Major source" was and is defined as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs. 42 U.S.C. § 7412(a)(1).
- 84. "Stationary source" was and is defined as any building, structure, facility, or installation which emits or may emit any air pollutant. 42 U.S.C. § 7412(a)(3) (stating that

"stationary source" under Section 112(a) has the same meaning as that term has under Section 111(a) of the CAA, 42 U.S.C. § 7411(a)(3)).

- 85. A "category" of sources is a group of sources having some common features suggesting that they should be regulated in the same way and on the same schedule.

 57 F.R. 31576, 31578 (July 16, 1992). A single stationary source can be comprised of multiple source categories. *Id*.
- 86. Congress directed EPA to promulgate regulations establishing emission standards for each category or subcategory of, *inter alia*, major sources of HAPs. 42 U.S.C. § 7412(d)(1). These emission standards must require the maximum degree of reduction in emissions of HAPs that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for the new or existing sources in the category or subcategory to which the emission standard applies. 42 U.S.C. § 7412(d)(2).
- 87. To the extent that it is not feasible to prescribe or enforce an emission standard for the control of a HAP, Congress authorized EPA to promulgate "design, equipment, work practice, or operational" standards, which are to be treated as emission standards.

 42 U.S.C. § 7412(h).
- 88. The emission standards promulgated under Section 112 of the 1990 Amendments of the CAA, 42 U.S.C. § 7412, are known as the National Emission Standards for Hazardous Air Pollutants ("NESHAPs") for Source Categories or "MACT" ("maximum achievable control technology") standards. These emission standards are found in Part 63 of Title 40 of the Code of Federal Regulations.

89. After the effective date of any emission standard, limitation, or regulation promulgated pursuant to Section 112 of the CAA, no person may operate a source in violation of such standard, limitation, or regulation. 42 U.S.C. § 7412(i)(3).

6. Part 63, Subpart A: General

- 90. Pursuant to Section 112 of the CAA, 42 U.S.C. § 7412, as it existed after the 1990 CAA Amendments, EPA promulgated regulations that contain general provisions applicable to sources that are subject to the MACT standards of Part 63 of Title 40 of the Code of Federal Regulations. 40 C.F.R. Part 63, Subpart A, §§ 63.1–63.16 ("Subpart A").
- 91. Under Subpart A, the provisions of 40 C.F.R. Part 63 "apply to the owner or operator of any stationary source that (i) emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and (ii) is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part." 40 C.F.R. § 63.1(b).
- 92. Under Subpart A, each relevant standard in Part 63 must identify explicitly whether each provision in Subpart A is or is not included in such relevant standard. 40 C.F.R. § 63.1(a)(4)(i).

7. Part 63 Subpart A: 40 C.F.R. § 63.6(e)(1)(i)

93. Within Subpart A of Part 63, EPA promulgated a requirement that corresponds to the "good air pollution control practices" requirement of Subpart A of the NSPS (*i.e.* 40 C.F.R. § 60.11(d)). Specifically, at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 40 C.F.R. § 63.6(e)(1)(i).

8. Part 63, Subpart A: 40 C.F.R. § 63.11(b) (Requirements related to Flares Used as Control Devices)

- 94. Within Subpart A of Part 63, EPA promulgated specific regulations that apply whenever flares are used as control devices. 40 C.F.R. § 63.11(b).
- 95. Of relevance to this complaint are the following requirements: flares shall be designed and operated with no visible emissions, 40 C.F.R. § 63.11(b)(4); flares shall be operated with a flame present at all times, 40 C.F.R. § 63.11(b)(5); for steam-assisted flares, the net heating value of the gas being combusted must be 300 British Thermal Units ("BTU") per standard cubic foot ("scf") or greater, 40 C.F.R. § 63.11(b)(6)(ii); for steam-assisted flares, certain exit velocity requirements must be met, 40 C.F.R. § 63.11(b)(7); the owner or operator must monitor the flare to ensure that it is operated and maintained in conformance with its design; 40 C.F.R. § 63.11(b)(1); and a flare must be operated at all times when emissions are vented to it. 40 C.F.R. § 63.11(b)(3).

9. Specific MACT Standards: Part 63, Subpart CC

- 96. Pursuant to Section 112(c) of the CAA, 42 U.S.C. § 7412(c), EPA identified petroleum refineries as a source category of HAPs. 57 F.R. 31576, 31591 (Table 1) (July 16, 1992).
- 97. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries. 60 Fed. Reg. 43260 (August 18, 1995). These standards are commonly referred to as the "Refinery MACT" and are found at 40 C.F.R. Part 63, Subpart CC, §§ 63.640–63.656 and associated Tables.
- 98. Of relevance to this complaint, the affected sources that Subpart CC applies to are all "miscellaneous process vents" and "equipment leaks" from petroleum refining process units

that are located at a plant site that is a major source and that emit or have equipment containing or contacting one or more of the HAPs listed in a table associated with Subpart CC. 40 C.F.R. §§ 63.640(c)(1), (c)(4).

- 99. Under Subpart CC, owners or operators of certain types of process vents must reduce emissions of organic HAPs from these vents by using either: (1) a flare that meets the requirements of 40 C.F.R. § 63.11(b), 40 C.F.R. § 63.643(a)(1); or (2) a different type of control device that reduces organic HAPs by 98 weight percent or to a concentration of 20 ppmv. 40 C.F.R. § 63.643(a)(2).
- 100. Under Subpart CC, owners and operators must comply with the equipment leak provisions of Subpart VV, 40 C.F.R. § 63.648(a), which requires compliance with 40 C.F.R. § 60.18.
- 101. Pursuant to Table 6 of Subpart CC, with certain exceptions that are not applicable here, owners or operators of affected facilities under Subpart CC are required to comply with 40 C.F.R. §§ 63.6(e) and 63.11(b).

10. Specific MACT Standards: Part 63, Subpart UUU

- 102. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), and several years after promulgating Subpart CC, EPA promulgated Subpart UUU: the "National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units." These standards are commonly referred to as the "Refinery MACT II" standards and are found at 40 C.F.R. Part 63, Subpart UUU, §§ 63.1560–1579 and associated Tables.
- 103. Of relevance to this complaint, the affected source that Subpart UUU applies to are process vents or groups of process vents on catalytic reforming units that are associated with

the regeneration of the catalyst used in the unit, 40 C.F.R. § 63.1562(b)(2), if the unit is located at a petroleum refinery that is a major source of HAP emissions. 40 C.F.R. § 63.1561(a).

- 104. Under Subpart UUU, owners or operators of process vents on catalytic reforming units that are affected sources have two compliance options for controlling emissions, one of which requires venting emissions to a flare that meets the control device requirements of 40 C.F.R. § 63.11(b). 40 C.F.R. § 63.1566(a)(1)(i).
- 105. Pursuant to Table 44 of Subpart UUU, owners and operators of affected facilities under Subpart UUU are required to comply with 40 C.F.R. §§ 63.6(e)(1) and 63.11(b).

11. Specific MACT Standards: Part 63, Subparts F, G, H, and I (the HON)

- 106. Pursuant to Section 112(c) of the CAA, 42 U.S.C. § 7412(c), EPA identified the synthetic organic chemical manufacturing industry ("SOCMI") as a source category of HAPs. 57 F.R. 31576, 31591 (Table 1) (July 16, 1992).
- 107. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry. 59 F.R. 19402 (April 22, 1994). These standards commonly are referred to as the "Hazardous Organic NESHAP" or the "HON."
- 108. The HON consists of four subparts in Part 63 of Title 40 of the Code of Federal Regulations: Subparts F, G, H, and I. *Id.* at 19405. Of relevance to this Complaint are Subparts F and G.
- 109. Subpart F provides the applicability criteria for SOCMI sources, requires that owners and operators of SOCMI sources comply with Subparts G and H, and specifies general recordkeeping and reporting requirements. *Id.* Subpart G generally sets forth regulations

governing process vents, storage vessels, transfer racks, and wastewater streams at SOCMI sources. *Id*.

- 110. Under Subpart F, the HON applies to chemical manufacturing process units that:

 (1) manufacture as a primary product one or more of the chemicals listed in Table 1 of

 Subpart F; (2) use as a reactant or manufacture as a product, or co-product, one or more of the

 organic HAPs listed in Table 2 of Subpart F; and (3) are located at a plant site that is a major

 source as defined in Section 112(a) of the CAA. 40 C.F.R. § 63.100(b).
- 111. A "chemical manufacturing process unit" is defined, *inter alia*, as the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. *Id.* § 63.101(b).
- 112. Table 1 of Subpart F lists approximately 385 chemicals which constitute SOCMI products that may be produced by a HAP-emitting process. 40 C.F.R. Subpart F, Table 1; 59 Fed. Reg. 19402, 19405 (1994).
- 113. Table 2 of Subpart F lists approximately 130 organic HAPs. 40 C.F.R. Subpart F, Table 2.
- 114. Owners and operators of sources that are subject to Subpart F are required to comply with Subpart G. 40 C.F.R. § 63.102(a).
- 115. Subpart G applies, *inter alia*, to all process vents within a source that is itself subject to Subpart F. *Id.* § 63.110.
- 116. Under Subpart G, there are two separately defined types of process vents. A "Group 1" process vent is a process vent with a flow rate greater than or equal to 0.005 standard cubic meters per minute, an organic HAP concentration greater than or equal to 50 parts per

million by volume (ppmV), and a Total Resource Effectiveness (TRE) index value¹ of less than or equal to 1.0. 40 C.F.R. § 63.111(b). "Group 2" process vents are vents that are not Group 1 process vents. *Id.* Facilities have the option of leaving process vents "ungrouped" so long as such ungrouped vents comply with the HON's process vent control requirements set forth at Section 63.113(a). *See* 40 C.F.R. § 63.113(h).

- 117. Gas from Group 1 or ungrouped process vents must either: (1) be controlled by a flare; (2) have its total organic hazardous air pollutants reduced by 98% or controlled to 20 ppmv, whichever is less stringent; or (3) achieve and maintain a TRE index value greater than 1.0. 40 C.F.R. § 63.113(a).
- 118. Under Subpart G, when gas from process vents are controlled by a flare, the flare must comply with the general control requirements for flares found at 40 C.F.R.§ 63.11(b) of Subpart A. 40 C.F.R.§ 63.113(a)(1)(i). The requirements of 40 C.F.R.§ 63.11(b) are found in Paragraph 95.

D.<u>TITLE V</u>

119. Title V of the Clean Air Act, 42 U.S.C. §§ 7661–7661f, establishes an operating permit program for certain sources, including major sources, sources subject to Sections 111 (NSPS program) or 112 (NESHAP/MACT program) of the CAA, or any source required to have a PSD or Nonattainment NSR Permit. 42 U.S.C. § 7661a(a). The purpose of Title V is to ensure that all "applicable requirements" that a source is subject to under the CAA, including SIP requirements, are collected in one permit. 42 U.S.C. § 7661c(a).

¹ The TRE index value is a measure of the supplemental total resource requirement per unit reduction of organic HAP associated with a process vent stream. The TRE index value is a cost-effectiveness index associated with an individual process vent stream and is dependent on the process vent flow rate, net heating value, total organic compounds (TOC) emission rate, and HAP emission rate. 40 C.F.R. § 63.115.

- 120. Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing the requirements of Title V and establishing the minimum elements of a Title V permit program to be administered by any state or local air pollution control agency.

 57 Fed. Reg. 32250 (July 21, 1992). These regulations are codified at 40 C.F.R. Part 70.
- 121. Texas has an EPA-approved Title V program. 30 Tex. Admin. Code, Chap. 122 (approved at 66 Fed. Reg. 63,318, Dec. 6, 2001). Texas is authorized to issue and enforce Title V permits. In all respects relevant to this Complaint, the Title V regulations of Texas closely mirror the federal Title V regulations codified at 40 C.F.R. Part 70.
- 122. Section 502(a) of the CAA (42 U.S.C. § 7661a(a)) and the Title V permit program and regulations of Texas provide that, after the effective date of the state Title V permit program, no person may violate any requirement of a Title V permit.
- 123. Section 502(a) of the CAA (42 U.S.C. § 7661a(a)), the implementing regulations at 40 C.F.R. §§ 70.1(b) and 70.7(b), and the Title V permit program and regulations of Texas provide that, after the effective date of the state Title V permit program, no source subject to Title V may operate except in compliance with a Title V permit.
- 124. Section 503(c) of the CAA (42 U.S.C. § 7661b(c)), the implementing regulations at 40 C.F.R. § 70.5(a), and the Title V permit program and regulations of Texas provide that each owner and operator of a source subject to Title V permitting requirements must submit a permit application. Among other things, the permit application must contain: (i) information sufficient to determine all applicable air pollution control requirements (including any requirement to meet the applicable control technology requirements under the PSD and Nonattainment NSR programs and to comply with the applicable NSPS and/or NESHAP/MACT standards), 40 C.F.R. § 70.5(c)(4); (ii) information that may be necessary to determine the applicability of

other applicable requirements of the CAA, 40 C.F.R. § 70.5(c)(5); (iii) a compliance plan for all applicable requirements for which the source is not in compliance, 42 U.S.C. § 7661b(b), 40 C.F.R. § 70.5(c)(8); and (iv) a certification of compliance with all applicable requirements by a responsible official. 40 C.F.R. § 70.5(c)(9).

- 125. Under 40 C.F.R. § 70.5(b) and the Title V permit program and regulations of Texas, any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
- 126. Section 504(a) of the CAA (42 U.S.C. § 7661c(a)), the implementing regulations at 40 C.F.R. § 70.6(a) and (c), and the Title V permit programs and regulations of Texas requires each Title V permit to include, *inter alia*, enforceable emission limitations and standards, a schedule of compliance, and such other conditions as are necessary to assure compliance with all applicable requirements of the CAA, including the requirements of the applicable SIP.
- 127. All terms and conditions of a Title V permit are enforceable by EPA. 42 U.S.C. § 7413(b); 40 C.F.R. § 70.6(b).

E. ENFORCEMENT OF THE CAA

128. Sections 113(a)(1) and (a)(3) of the CAA, 42 U.S.C. §§ 7413(a)(1) and (a)(3), authorize EPA to bring a civil action under Section 113(b) if EPA finds that any person is in violation of any requirement or prohibition of a SIP, the PSD and Nonattainment NSR permit programs, a PSD or Nonattainment NSR permit, the NSPS program, the NESHAP/MACT program, the Title V permit program, or a Title V permit.

- 129. Section 113(b) of the CAA, 42 U.S.C. § 7413(b), authorizes the Court to enjoin a violation, to require compliance, to assess and recover a civil penalty, and to award any other appropriate relief for each violation.
- 130. Section 113(b) of the CAA, 42 U.S.C. § 7413(b), authorizes civil penalties of up to \$25,000 per day for each violation of the CAA.
- 131. The Civil Penalties Inflation Act of 1990, 28 U.S.C. § 2461 *et seq.*, as amended by the Debt Collection Improvements Act of 1996, 31 U.S.C. § 3701 *et seq.*, requires EPA to periodically adjust its civil penalties for inflation. On December 31, 1996, February 13, 2004, and December 11, 2008, EPA adopted and revised regulations entitled "Adjustment of Civil Monetary Penalties for Inflation," 40 C.F.R. Part 19, to upwardly adjust the maximum civil penalty under the CAA. For each violation that occurs between January 31, 1997, and March 15, 2004, inclusive, penalties of up to \$27,500 per day may be assessed; for each violation that occurs between March 16, 2004, and January 12, 2009, inclusive, penalties of up to \$32,500 per day may be assessed; and for each violation that occurs on and after January 13, 2009, penalties of up to \$37,500 per day may be assessed. 60 Fed. Reg. 69,360 (Dec. 31, 1996); 60 Fed. Reg. 7121 (Feb. 12, 2004); 73 F.R. 75,340 (Dec. 11, 2008).

II. CLEAN AIR ACT CLAIMS: 1–10

General Allegations

- 132. SDP is the "owner or operator," within the meaning of the CAA, of the SDP Chemical Plant and Refinery.
- 133. The Chemical Plant and Refinery are each a "major emitting facility," a "source," a "stationary source," a "major stationary source," and a "major source" within the meaning of the CAA, the New Source Review permit programs and regulations (including the PSD,

Nonattainment NSR, and Minor NSR programs), the NSPS program and regulations, the NESHAP/MACT program and regulations, the Title V program and regulations, and the Texas SIP that adopts, incorporates, and/or implements these programs and regulations.

- 134. The Chemical Plant and Refinery each has a Title V permit that has been issued by Texas.
- 135. The Chemical Plant and Refinery use one or more steam-assisted flares which are listed in Paragraph 2 above.
- 136. A flare is a combustion device that uses an uncontrolled volume of ambient air to burn gases.
- 137. A steam-assisted flare is a flare that utilizes steam piped to the flare tip to assist in combustion.

CLEAN AIR ACT CLAIM 1

Violation of PSD, Nonattainment NSR, and Texas SIP Requirements at SDP's Chemical Plant and Refinery Flares

Failure to Apply for, Obtain, and Operate Pursuant to PSD and/or Nonattainment NSR Permits

- 138. Plaintiff realleges and incorporates by reference Paragraphs 8–11 and 132–137 as if fully set forth herein.
- 139. Upon information and belief, at various times from 2006 to the present, SDP has commenced construction of a "major modification," as defined in the CAA and the Texas SIP, at the Chemical Plant and the Refinery. The modifications involved physical changes in or changes in the methods of operation of the flare systems of the Chemical Plant and the Refinery, including physical changes in or changes in the methods of operation of the Flare subheaders within process units, Flare headers, Flare stacks, and Flare tips.

- 140. Upon information and belief, these modifications resulted in a significant emissions increases of sulfur dioxide ("SO₂"), hydrogen sulfide ("H₂S"), volatile organic compounds ("VOCs"), and carbon monoxide ("CO") and a significant net emissions increase of these pollutants from the Chemical Plant and Refinery Flares.
- 141. SDP did not apply for, obtain, or operate pursuant to either a PSD or a Nonattainment NSR permit, as applicable, for any of these modifications.
- 142. By failing to apply for, obtain, and operate pursuant to a PSD permit (for those pollutants where Deer Park, Texas, is either in attainment or unclassifiable), SDP failed to:
 (i) undergo a proper BACT determination for SO₂, H₂S, VOCs, and CO for the flare systems for each Flare in connection with each major modification; (ii) install and operate BACT on the flare systems of each Flare for the control of SO₂, H₂S, VOCs, and CO; (iii) demonstrate that the emissions increases from the modifications would not cause or contribute to violations of air quality standards; (iv) provide for review and public comment on the air quality impacts of the modifications; and (v) otherwise comply with the requirements of the PSD program and the SIP of Texas.
- 143. By failing to apply for, obtain, and operate pursuant to a Nonattainment NSR permit (for those pollutants where Deer Park, Texas, is in nonattainment), SDP failed to:

 (i) undergo a proper LAER determination for SO₂, VOCs, and CO for the flare systems for each Chemical Plant and Refinery Flare in connection with each major modification; (ii) install and operate LAER on the flare systems of each Chemical Plant and Refinery Flare for the control of SO₂, VOCs, and CO; (iii) secure emissions reductions (offsets) from existing sources in the same area where the Chemical Plant and Refinery are located such that there would be reasonable

progress toward attainment of the applicable NAAQS; and (iv) otherwise comply with the requirements of the Nonattainment NSR program and the Texas SIP.

- 144. The acts and/or omissions identified in this Claim constitute violations of:
 - (a) 42 U.S.C. § 7475;
 - (b) 40 C.F.R. §§ 52.21(a)(2)(iii) and 52.21(j)–52.21(r)(5);
 - (c) 42 U.S.C. §§ 7502(c)(5), 7503(a)–(c);
 - (d) 40 C.F.R. Part 51, Appendix S, Part IV, Conditions 1–4; and
 - (e) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 144(a)–(d).

CLEAN AIR ACT CLAIM 2

Violation of Minor NSR Requirements of the Texas SIP at SDP's Chemical Plant and Refinery Flares

Failure to Apply for, Obtain, and Operate Pursuant to Minor NSR Permits

- 145. Plaintiff realleges and incorporates by reference Paragraphs 8–11 and 132–137 as if fully set forth herein.
- 146. Upon information and belief, at various times from 2006 to the present, SDP has commenced construction of a "modification," as defined in the Texas SIP, at its Chemical Plant and Refinery. The modifications involved physical changes in or changes in the methods of operation of the flare systems of the Chemical Plant and the Refinery, including physical changes in or changes in the methods of operation of the Flare subheaders within process units, Flare headers, Flare stacks, and Flare tips.
- 147. Upon information and belief, these modifications resulted in increases in emissions of SO₂, H₂S, VOCs, and CO that triggered Minor NSR, but these increases were not

"significant emissions increases" or "significant net emissions increases" as defined in PSD and Nonattainment NSR programs and regulations.

- 148. SDP did not apply for, obtain, or operate pursuant to a Minor NSR permit for any of these modifications.
- 149. SDP's failure to apply for, obtain, and operate pursuant to a Minor NSR permit for these modifications prevented Texas from determining whether the modifications violated its control strategies or interfered with attainment or maintenance of a national standard in Texas or in a neighboring state.
- 150. The acts and/or omissions identified in this Claim constitute violations of the Minor NSR program of Texas identified in Paragraph 47 of this Complaint.

CLEAN AIR ACT CLAIM 3

Violation of Title V and Texas SIP Requirements
As Relate to PSD, Nonattainment NSR, and Minor NSR Requirements at SDP's Chemical
Plant and Refinery Flares

Failure to Submit Timely and Complete Title V Permit Applications and/or Supplement and Correct Previously Submitted Title V Permit Applications To Incorporate PSD, Nonattainment NSR, and/or Minor NSR Requirements;

Operation without Valid Title V Permits Incorporating

PSD and/or Nonattainment NSR and/or Minor NSR Requirements

- 151. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, 139–143, 146–148 as if fully set forth herein.
- 152. Upon information and belief, as alleged in Claims 1 and 2, SDP undertook activities constituting major modifications and/or non-major modifications at its Chemical Plant and Refinery. For the major modifications, these activities triggered requirements, *inter alia*, to obtain PSD and/or Nonattainment NSR permits establishing emissions limitations that meet BACT and/or LAER at SDP's Chemical Plant and Refinery Flares, to operate in compliance

with BACT and/or LAER at SDP's Chemical Plant and Refinery Flares, and to otherwise comply with the requirements of the PSD and/or Nonattainment NSR permit programs. For the non-major modifications, these activities triggered requirements that would have enabled Texas to determine if conditions or limitations on SDP's Chemical Plant and Refinery Flares should have been imposed on the modification and/or subsequent operation.

- SDP failed to submit complete and timely applications for Title V operating 153. permits at its Chemical Plant and Refinery that: (i) for the major modifications, included, inter alia, enforceable BACT and/or LAER limits at SDP's Chemical Plant and Refinery Flares, identified all applicable requirements, accurately certified compliance with such requirements, and contained a compliance plan for all applicable requirements for which the Chemical Plant and Refinery were not in compliance; and (ii) for the non-major modifications, included, inter alia, conditions or limitations that Texas might have considered imposing on the Chemical Plant and Refinery Flares under the Minor NSR program. In the alternative, SDP failed to supplement and correct previously submitted Title V permit applications in order to: (i) for the major modifications, seek enforceable BACT and/or LAER limits at SDP's Chemical Plant and Refinery Flares, identify all applicable requirements, accurately certify compliance with such requirements, and include a compliance plan for requirements for which the Chemical Plant and Refinery were not in compliance; and (ii) for the non-major modifications, seek conditions or limitations that Texas might have considered imposing on the Chemical Plant and Refinery Flares under the Minor NSR program.
- 154. SDP continued and continues to operate its Chemical Plant and Refinery without having valid Title V operating permits that require compliance with BACT and/or LAER at SDP's Chemical Plant and Refinery Flares or contain a compliance plan for coming into

compliance with BACT and/or LAER at SDP's Chemical Plant and Refinery Flares or contain conditions or limitations that Texas might have imposed on SDP's Chemical Plant and Refinery Flares under the Minor NSR program.

- 155. The acts and/or omissions identified in this Claim constitute violations of:
 - (a) Title V of the CAA at 42 U.S.C. §§ 7661a(a), 7661b(c), 7661c(a);
 - (b) Title V implementing regulations at 40 C.F.R. §§ 70.1(b), 70.5(a) and (b), 70.6(a) and (c), and 70.7(b); and
 - (c) The federally enforceable Texas Title V program to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 155(a) and (b).

CLEAN AIR ACT CLAIM 4

Violation of NSPS Subpart J Emission Limit, Title V Permits that Incorporate the Limit, And Texas SIP Requirements

Failure to Comply with H₂S Emission Limit for Fuel Gas Sent to the Refinery Flares

- 156. Plaintiff realleges and incorporates by reference Paragraphs 8–11 and 132–137 as if fully set forth herein.
- 157. Each of SDP's Refinery Flares constitutes a "fuel gas combustion device" within the meaning of 40 C.F.R. § 60.100(a), and an "affected facility" within the meaning of 40 C.F.R. § 60.2.
- 158. Each of SDP's Refinery Flares is subject to 40 C.F.R. Part 60, Subpart J, and the requirements in the Refinery's Title V permit that compels compliance with Subpart J at the Flares.
- 159. From at least October 2006 through July 2008, SDP periodically burned fuel gas in the Coker, North, and West Flares at the Refinery that contained H₂S in excess of 230 milligrams per dry standard cubic meter (approximately 161 ppm), under circumstances in which

no exceptions to that standard apply. Upon information and belief, at additional times from July 2008 to the present, SDP burned fuel gas in all of its Refinery Flares that contained H₂S in excess of 230 milligrams per dry standard cubic meter (approximately 161 ppm), under circumstances in which no exceptions to that standard apply.

- 160. The acts and/or omissions identified in this Claim constitute violations of:
- (a) Section 111 of the CAA, 42 U.S.C. § 7411;
- (b) Section 111's implementing regulation at 40 C.F.R. § 60.104(a)(1);
- (c) Those provisions of the Refinery's Title V Permit that require compliance with 40 C.F.R. § 60.104(a)(1);
- (d) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
- (e) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 160(a)–(d).
- 161. The acts and/or omissions identified in this Claim also constitute violations of Section X (as it relates to Flares) of SDP's Petroleum Refinery Initiative Consent Decree, as amended and revised, entered in an action styled <u>United States v. Deer Park Refining Limited Partnership</u>, Civ. Act. No. H-01-0978 (S.D. Tx) (hereinafter "SDP's PRI Consent Decree").

CLEAN AIR ACT CLAIM 5

Violation of NSPS Subpart J Monitoring Requirement, Title V Permits that Incorporate Monitoring Requirement and Texas SIP Requirements

Failure to Install, Calibrate, Operate, and Maintain H₂S Continuous Emissions Monitoring Systems on Flares

- 162. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, and 157–158 as if fully set forth herein.
- 163. Upon information and belief, from 2006 to the present, at one or more of the Refinery Flares at SDP's Refinery, SDP failed to install, calibrate, operate, and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in the fuel gases before burning the fuel gas in the Refinery Flare.
 - 164. The acts and/or omissions identified in this Claim constitute violations of:
 - (a) Section 111 of the CAA, 42 U.S.C. § 7411;
 - (b) Section 111's implementing regulation at 40 C.F.R. § 60.105(a)(4);
 - (c) Those provisions of the Refinery's Title V Permit that require compliance with 40 C.F.R. § 60.105(a)(4);
 - (d) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
 - (e) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 164(a)–(d).
- 165. The acts and/or omissions identified in this Claim also constitute violations of Section X (as it relates to Flares) of SDP's PRI Consent Decree.

CLEAN AIR ACT CLAIM 6

Violation of Certain NSPS and NESHAP Subpart A Requirements related to Flares, Title V Permits that Incorporate these Requirements, and Corresponding State SIP Requirements

SDP's Flares: Visible Emissions; Operation without a Flame Present; Exit Velocity Violations; and Lack of Operation When Emissions are Vented

- 166. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, and 157–158 as if fully set forth herein.
- 167. The SDP Refinery has "equipment" within the meaning of 40 C.F.R. §§ 60.590(a) and 60.590a(a). This equipment is an "affected facility" within the meaning of 40 C.F.R. § 60.2.
- 168. The SDP Chemical Plant has "equipment" within the meaning of 40 C.F.R. §§ 60.481 and 60.481a. This equipment is an "affected facility" within the meaning of 40 C.F.R. § 60.2.
- 169. The equipment at the SDP Refinery is subject to the requirements of 40 C.F.R. Part 60, Subparts GGG and GGGa, and, by reference therein, to the requirements of 40 C.F.R. Part 60, Subpart VV and VVa. The equipment at the SDP Chemical Plant is subject to the requirements of 40 C.F.R. Part 60, Subpart VV and VVa. The equipment at both the Refinery and Chemical Plant also is subject to the requirements in the Refinery's Title V permit that compels compliance with 40 C.F.R. Part 60, Subparts GGG, GGGa, VV, and VVa.
- 170. The SDP Refinery has "miscellaneous process vents" and "equipment leaks" within the meaning of 40 C.F.R. § 63.640(c)(1) and (4). These miscellaneous process vents and equipment leaks are "affected sources" within the meaning of 40 C.F.R. § 63.2.
- 171. These miscellaneous process vents and equipment leaks are subject to the requirements of 40 C.F.R. Part 63, Subpart CC, and, for the equipment leaks, also are subject to the requirements of 40 C.F.R. Part 60, Subpart VV. In addition, these miscellaneous process

vents and equipment leaks are subject to the requirements in the Refinery's Title V permit that compels compliance with 40 C.F.R. Part 63, Subpart CC and 40 C.F.R. Part 60, Subpart VV.

- 172. The SDP Refinery has "process vents or groups of process vents" on "catalytic reforming units," within the meaning of 40 C.F.R. § 63.1579. These process vents or groups of process vents on catalytic reforming units are "affected sources" within the meaning of 40 C.F.R. § 63.2
- 173. These process vents or groups of process vents are subject to the requirements of 40 C.F.R. Part 63, Subpart UUU. These process vents or groups of process vents also are subject to the requirements in the Refinery's Title V permit that compels compliance with 40 C.F.R. Part 63, Subpart UUU.
- 174. On information and belief, SDP uses one or more Flares at the Refinery as a control device for compliance with the standards found at 40 C.F.R. Part 60, Subparts GGG, GGGa, VV, and VVa and/or at 40 C.F.R. Part 63, Subparts CC and UUU, for equipment, process vents, equipment leaks, and process vents or groups of process vents on catalytic reforming units. On information and belief, SDP uses one or more Flares at the Chemical Plant as a control device for compliance with the equipment leak standards found at 40 C.F.R. Part 60, Subparts VV and VVa.
- 175. The SDP Chemical Plant and Refinery each are subject to the Benzene Waste Operations NESHAP at 40 C.F.R. Part 61, Subpart FF. The SDP Chemical Plant and Refinery each have at least one "control device" within the meaning of 40 C.F.R. § 61.341 (definitions in Subpart FF).
- 176. These control devices are subject to the requirements of 40 C.F.R. Part 61, Subpart FF. In addition, these control devices are subject to the requirements in the Title V

permits of the Chemical Plant and Refinery that compel compliance with 40 C.F.R. Part 61, Subpart FF.

- 177. SDP uses one or more Flares at the Refinery and the Chemical Plant as a control device under Subpart FF pursuant to 40 C.F.R. § 61.349(a)(2)(iii).
- 178. SDP's Chemical Plant has one or more "Group 1 process vents" within the meaning of 40 C.F.R. § 63.111.
- 179. These Group 1 process vents are subject to the requirements of 40 C.F.R. Part 63, Subpart G. These Group 1 process vents also are subject to the requirements in the Chemical Plant's Title V permit that compels compliance with 40 C.F.R. Part 63, Subpart G.
- 180. SDP uses one or more Flares at the Chemical Plant and the Refinery as a control device for compliance with the process vents standards found at 40 C.F.R. Part 63, Subpart G. 40 C.F.R. § 63.113(a)(1)(i).
- 181. SDP's Refinery and Chemical Plant Flares are subject to the requirements of 40 C.F.R. § 60.18(b). In addition, one or more of SDP's Refinery Flares and one or more of SDP's Chemical Plant Flares also are subject to the requirements of 40 C.F.R. § 63.11(b). On information and belief, the remainder of the Chemical Plant Flares are subject to 40 C.F.R. § 63.11(b) as well.
- 182. On information and belief, at various times from 2006 to the present, at one or more of the Flares at the Chemical Plant and Refinery, SDP did as follows: operated the Chemical Plant and Refinery Flares with visible emissions; operated the Chemical Plant and Refinery Flares at times when no flame was present; failed to comply with maximum exit velocity requirements, and failed to operate the Chemical Plant and Refinery Flares at all times when emissions were vented to them.

- 183. The acts and omissions identified in this Claim constitute violations of:
- (a) Sections 111 and 112 of the CAA, 42 U.S.C. §§ 7411, 7412;
- (b) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(c)(1) and 63.11(b)(4) (prohibition on visible emissions in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
- (c) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(c)(2) and 63.11(b)(5) (flame presence requirement in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
- (d) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(c)(4) and 63.11(b)(7) (exit velocity requirements for steam-assisted flares in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
- (e) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(e) and 63.11(b)(3) (requirement to operate during emissions venting in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
- (f) Section 111's implementing regulations at 40 C.F.R. §§ 60.592(a), 60.592a(a), 60.482-10(d), and 60.482-10a(d) (relevant provisions of NSPS's Subparts GGG, GGGa, VV and VVa), insofar as these provisions relate to flares and require compliance with 40 C.F.R. §§ 60.18(c)(1), (2), (4), and (e);
- (g) Section 112's implementing regulation at 40 C.F.R. § 61.349(a)(2)(iii) (relevant provision of Subpart FF), insofar as this provision requires compliance with 40 C.F.R. §§ 60.18(c)(1), (2), (4), and (e);
- (h) Section 112's implementing regulation at 40 C.F.R. §§ 63.113(a)(1)(i) (relevant provision of Subpart G), insofar as this provision requires compliance with 40 C.F.R. §§ 63.11(b)(3), (4), (5) and (7);
- (i) Section 112's implementing regulations at 40 C.F.R. §§ 63.643(a)(1), 63.648(a), and 63.1566(a)(1)(i) (relevant provisions of NESHAP/MACT's Subparts CC and UUU), insofar as these provisions relate to flares and require compliance with 40 C.F.R. §§ 63.11(b)(3), (4), (5) and (7);
- (j) Those provisions of the Refinery's and Chemical Plant's Title V Permits that require compliance with the statutory and regulatory requirements identified in Subparagraphs 183(a)–(i);
- (k) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a (a) and 40 C.F.R. § 70.7(b); and

(l) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 183(a)–(k).

CLEAN AIR ACT CLAIM 7

Violation of an NSPS and NESHAP/MACT Subpart A Requirement related to Flares, Title V Permits that Incorporate this Requirement, and Corresponding State SIP Requirements

Combusting Gas in Flares that Has a Net Heating Value of Less than 300 BTU/scf

- 184. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, 157–158, and 167–181 as if fully set forth herein.
- 185. On numerous occasions from at least February 2006 through July 2008, SDP combusted gas in the following Flares that had a Net Heating Value of less than 300 BTU/scf: East, Ethylene (aka Girbotol), North, Olefins II, Olefins III, Olefins Ground, and West Flares. On information and belief, SDP continued, on numerous occasions from July 2008 to the present, to combust gas in these Flares that had a Net Heating Value of less than 300 BTU/scf. On information and belief, at numerous occasions from February 2006 to the present, SDP combusted gas in the remaining Flares at the Refinery and Chemical Plant that had a Net Heating Value of less than 300 BTU/scf.
 - 186. The acts and omissions identified in this Claim constitute violations of:
 - (a) Sections 111 and 112 of the CAA, 42 U.S.C. §§ 7411, 7412;
 - (b) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(c)(3)(ii) and 63.11(b)(6)(ii) (BTU/scf requirement in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
 - (c) Section 111's implementing regulations at 40 C.F.R. §§ 60.592(a), 60.592a(a), 60.482-10(d), and 60.482-10a(d) (relevant provisions of NSPS's Subparts GGG, GGGa, VV and VVa), insofar as they relate to flares and require compliance with 40 C.F.R. § 60.18(c)(3)(ii);

- (d) Section 112's implementing regulation at 40 C.F.R. § 61.349(a)(2)(iii) (relevant provision of Subpart FF), insofar as that provision requires compliance with 40 C.F.R. § § 60.18(c)(3)(ii);
- (e) Section 112's implementing regulations at 40 C.F.R. §§ 63.113(a)(1)(i) (relevant provision of Subpart G), insofar as that provision requires compliance with 40 C.F.R. § 63.11(b)(6)(ii);
- (f) Section 112's implementing regulations at 40 C.F.R. §§ 63.643(a)(1), 63.648(a), and 63.1566(a)(1)(i) (relevant provisions of NESHAP/MACT's Subparts CC and UUU), insofar as they relate to flares and require compliance with 40 C.F.R. § 63.11(b)(6)(ii);
- (g) Those provisions of Refinery's and Chemical Plant's Title V Permits that require compliance with the statutory and regulatory requirements identified in Subparagraphs 186(a)–(f);
- (h) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
- (i) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 186(a)—(h).

CLEAN AIR ACT CLAIM 8

Violation of an NSPS and NESHAP/MACT Subpart A Requirement related to Flares; Title V Permits that Incorporate this Requirement, and Texas SIP Requirements

Failure to Operate Flares in a Manner Consistent with Good Air Pollution Control Practices

- 187. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, 157–158, and 167–181 as if fully set forth herein.
- 188. Each of SDP's Flares is subject to the NSPS and therefore is subject to the General Provisions of the NSPS found at Subpart A. Under 40 C.F.R. § 60.11(d) (found in Subpart A), SDP was and is required, at all times, including periods of startup, shutdown, and malfunction, to the extent practicable, to maintain and operate its flares in a manner consistent with good air pollution control practice for minimizing emissions.

- 189. SDP's East, Ethylene (aka Gerbitol), Olefins II, Olefins III, and Olefins Ground Flares each are used as control devices for compliance with 40 C.F.R. Part 61, Subpart FF, and are therefore subject to the general provisions of Part 61 found at Subpart A. Under 40 C.F.R. § 61.12(c) (found in Subpart A), SDP must "maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions."
- 190. SDP's Coker and North Flares are used as control devices for compliance with 40 C.F.R. Part 63, Subpart CC. Under Subpart CC, these Flares are subject to the general provisions of Part 63 found at Subpart A. Under 40 C.F.R. § 63.6(e)(1)(i), SDP was and is required, at all times, including periods of startup, shutdown, and malfunction, to the extent practicable, to maintain and operate these flares in a manner consistent with good air pollution control practice for minimizing emissions.
- 191. Good air pollution control practices for minimizing emissions at flares involve, *inter alia*, combusting essentially all molecules of hydrogen sulfide, hydrocarbons, and hazardous air pollutants ("HAPs") in the gases sent to the flares by ensuring that they have sufficient heating value and oxygen to allow for complete combustion. For steam-assisted flares (all of SDP's flares are steam-assisted), good air pollution control practices for minimizing emissions also involve, *inter alia*, injecting steam at a rate that maximizes flame stability and flare combustion efficiency.
- 192. In order to ensure that the gases sent to flares have sufficient heating value to ensure complete combustion, good air pollution control practices for minimizing emissions at flares involve, *inter alia*, monitoring, measuring, and/or calculating the net heating value ("NHV") of the gases in the combustion zone ("Combustion Zone Gas") of a flare. In addition,

supplemental gas must be immediately available for addition to the gas being sent to the flare (the "Vent Gas") to ensure that the NHV of the Combustion Zone Gas is maintained at a level that ensures adequate flare combustion efficiency.

- 193. In order to inject steam at a proper rate, good air pollution control practices for minimizing emissions at steam-assisted flares involve, *inter alia*, monitoring the Vent Gas flow rate and steam flow rate to the flare, calculating the ratio of the Vent Gas flow rate to the steam flow rate ("S/VG"), and having sufficient controls on the steam flow rate to enable increasing or decreasing it in order to optimize S/VG to minimize emissions.
- 194. On numerous occasions from at least February 2006 through July 2008, SDP operated its Coker, East, Ethylene (aka Gerbotol), North, Olefins II, Olefins III, and Olefins Ground Flares without sufficient Net Heating Value in the Combustion Zone Gas. On information and belief, on numerous occasions from July 2008 to the present, it continued to so operate these Flares. In addition, on information and belief, on numerous occasions from 2006 to the present, SDP operated the remainder of its Chemical and Refinery Flares without a sufficient Net Heating Value in the Combustion Zone Gas. This insufficient NHV reduced flare combustion efficiency and resulted in emissions to the atmosphere of uncombusted hydrogen sulfide, uncombusted and partially-combusted HAPs and hydrocarbons (including VOCs), and carbon monoxide.
- 195. On numerous occasions from at least February 2006 through July 2008, SDP operated its Coker, East, Ethylene (aka Gerbotol), North, Olefins II, Olefins III, and Olefins Ground Flares with an excessively high S/VG. On information and belief, on numerous occasions from July 2008 to the present, it continued to so operate these Flares. In addition, on information and belief, on numerous occasions from 2006 to the present, SDP operated the

remainder of its Chemical Plant and Refinery Flares with an excessively high S/VG. This excessively high S/VG increased the likelihood of flame quenching, reduced flare combustion efficiency, and resulted in emissions of uncombusted hydrogen sulfide, uncombusted and partially-combusted HAPs and hydrocarbons (including VOCs), and carbon monoxide.

- 196. From at least February 2006 through July 2008, SDP failed to have, or failed to utilize, any equipment or monitoring system at its Refinery and Chemical Plant Flares to enable SDP to calculate the NHV in the Combustion Zone Gas of the Flares. In addition, SDP failed to have supplemental gas immediately available for addition to the Vent Gas. These failures continued for some time past July 2008.
- 197. From at least February 2006 through July 2008, SDP failed to install, or failed to utilize properly, Vent Gas flow monitors and steam flow monitors at its Refinery and Chemical Plant Flares; failed to calculate S/VG at its Refinery and Chemical Plant Flares; and failed to have sufficient controls on steam flow to maintain an S/VG that minimized emissions at its Refinery and Chemical Plant Flares. These failures continued for some time past July 2008.
- NHV in the Combustion Zone Gas, without monitoring the NHV in the Combustion Zone Gas, without supplemental gas immediately available, with excessively high Steam-to-Vent-Gas ratios, without any (or without sufficient) monitors to measure and calculate S/VG, and without sufficient controls on its steam to optimize the steam injection rate violated the requirement to operate the Flares in a manner consistent with good air pollution control practices for minimizing emissions.
 - 199. The acts and omissions identified in this Claim constitute violations:
 - (a) Sections 111 and 112 of the CAA, 42 U.S.C. §§ 7411, 7412;

- (b) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.11(d) and 63.6(e)(1)(i) (good air pollution control practices requirement in Subpart A of Part 60 (NSPS) and Part 63 (NESHAP/MACT));
- (c) Section 112's implementing regulations at Table 6 of Subpart CC of Part 63 of Title 40 of the Code of Federal Regulations, insofar as that Table relates to flares and requires compliance with 40 C.F.R. § 63.6(e)(1)(i);
- (d) Section 112's implementing regulations at Table 44 of Subpart UUU of Part 63 of Title 40 of the Code of Federal Regulations, insofar as that Table relates to flares and requires compliance with 40 C.F.R. § 63.6(e)(1)(i);
- (e) Section 112's implementing regulation at 40 C.F.R. § 61.349(a)(2)(ii) (relevant provision in Subpart FF), insofar as that provision requires compliance with 40 C.F.R. § 61.12(c);
- (f) Those provisions of Refinery's and Chemical Plant's Title V Permits that require compliance with the statutory and regulatory requirements identified in Subparagraphs 199(a)–(e);
- (g) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
- (h) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 199(a)–(g).

CLEAN AIR ACT CLAIM 9

Violation of an NSPS and NESHAP/MACT Subpart A Requirement related to Flares; Title V Permits that Incorporate this Requirement, and Texas SIP Requirements

Failure to Monitor Flares to Ensure that They Are Operated and Maintained in Conformance with their Design

- 200. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, 157–158, 167–181, 191, 193, 195, and 197 as if fully set forth herein.
- 201. Each of SDP's Chemical Plant and Refinery Flares is subject to the requirements of 40 C.F.R. § 60.18(d), and at least two of the Flares at SDP's Chemical Plant and Refinery are subject to requirements of 40 C.F.R. § 63.11(b)(1). Under these provisions, SDP was and is

required to monitor each Flare to ensure that it is operated and maintained in conformance with its design. Flares are designed, in part, to achieve high combustion efficiency of VOCs.

- 202. As part of its design, a steam-assisted flare must be operated within a range of Steam-to-Vent-Gas ratios that, on the one hand, avoids smoking through an insufficient S/VG, and, on the other hand, avoids excessive S/VG. Both insufficient and excessive S/VG reduce VOC combustion efficiency below a flare's designed efficiency.
- 203. In order to operate a steam-assisted flare in conformance with its design, the Vent Gas flow to the flare must be monitored; the steam flow to the flare must be monitored; the ratio of the Vent Gas flow to steam flow must be calculated; and the steam flow must be subject to sufficient control to enable increasing or decreasing it in order to maintain a design-appropriate S/VG and a high VOC combustion efficiency consistent with design parameters.
- 204. Upon information and belief, on numerous occasions from 2006 to the present, at one or more of the Chemical Plant and Refinery Flares, SDP failed to install and/or properly operate Vent Gas flow monitors and steam flow monitors; failed to calculate Steam-to-Vent-Gas ratios; and failed to have sufficient controls on steam flow to maintain Steam-to-Vent-Gas ratios within design parameters.
 - 205. The acts and omissions identified in this Claim constitute violations of:
 - (a) Sections 111 and 112 of the CAA (42 U.S.C. §§ 7411, 7412);
 - (b) Section 111's and 112's implementing regulations at 40 C.F.R. §§ 60.18(d), 63.11(b)(1);
 - (c) Section 111's implementing regulations at 40 C.F.R. §§ 60.592(a), 60.592a(a), 60.482-10(d), 60.482-10a(d), 60.482-10(e), and 60.482-10a(e) (relevant provisions of NSPS's Subparts GGG, GGGa, VV and VVa) insofar as they relate to flares and require compliance with 40 C.F.R. § 60.18(d);
 - (d) Section 112's implementing regulations at 40 C.F.R. §§ 63.643(a)(1), 63.648(a), and 63.1566(a)(1)(i) (relevant provisions of NESHAP/MACT's Subparts CC and

- UUU) insofar as they relate to flares and require compliance with 40 C.F.R. § 63.11(b)(1);
- (e) Section 112's implementing regulation at 40 C.F.R. § 61.349(a)(2)(iii) (relevant provision of Subpart FF), insofar as that provision requires compliance with 40 C.F.R. § 60.18(d);
- (f) Section 112's implementing regulation at 40 C.F.R. §§ 63.113(a)(1)(i) (relevant provision of Subpart G), insofar as that provision requires compliance with 40 C.F.R. § 63.11(b)(1);
- (g) Those provisions of Refinery's and Chemical Plant's Title V Permits that require compliance with the statutory and regulatory requirements identified in Subparagraphs 205(a)–(f);
- (h) The prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and
- (i) The federally enforceable Texas SIP to the extent that it adopts, incorporates, and/or implements any of the federal provisions cited in Subparagraphs 205(a)–(h).

CLEAN AIR ACT CLAIM 10 Texas SIP

Violation of Certain Texas SIP Requirements Caused by Insufficient Heating Value in Combustion Zone Gas, Oversteaming, and Poor Operation of Flares at SDP's Chemical Plant and Refinery

- 206. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 132–137, and 194–197 as if fully set forth herein.
- 207. As part of the federally enforceable Texas SIP, 37 Fed. Reg. 10,895 (May 31, 1972), EPA approved the following: "No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property." 30 Texas Admin. Code § 101.4.

- 208. As part of the federally enforceable Texas SIP, 75 Fed. Reg. 68,989 (Nov. 10, 2010), EPA approved, in relevant part, the following: "All pollution emission capture equipment and abatement equipment must be maintained in good working order and operated properly during facility operations." 30 Texas Admin. Code § 101.221(a).
- 209. As part of the federally enforceable Texas SIP, 71 Fed. Reg. 52,656 (Sept. 6, 2006), EPA approved, in relevant part, the following: "HRVOC [Highly-Reactive Volatile Organic Compound] emissions at each site located in the Houston/Galveston/Brazoria area . . . must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination." 30 Texas Admin. Code § 115.722(c)(2).
- 210. As part of the federally enforceable Texas SIP, 75 Fed. Reg. 68,989 (Nov. 10, 2010), EPA approved a provision that requires owners and operators to undertake a series of actions related to emissions events when the reportable quantity (as defined earlier in the Texas regulations) of pollutants is exceeded. 30 Texas Admin. Code § 101.201. These requirements include but are not limited to: (1) determining if a reportable emissions event occurred; (2) notifying the Texas Commission on Environmental Quality ("TCEQ") within 24-hours of a reportable emissions event, including providing a list of specific information relating to the event; (3) creating, and retaining for five years, a final record of all reportable and non-reportable emissions events by no later than two weeks after the end of the emissions event, including retaining a list of specific information related to the event; (4) performing, if requested by TCEQ, a technical evaluation of the emissions event; and (5) submitting to TCEQ an annual emissions event report, including providing the total number of reportable and non-reportable

emissions events and estimating the total quantities of air contaminants that were emitted during the emissions events. 30 Texas Admin. Code § 101.201.

- 211. As part of the federally enforceable Texas SIP, 75 Fed. Reg. 68989 (Nov. 10, 2010), EPA approved a provision which requires owners or operators to provide notice to the TCEQ at least ten days, or as soon as practicable, prior to any scheduled maintenance, startup, or shutdown activity that is expected to cause an unauthorized emission that equals or exceed the reportable quantity [as defined in an earlier regulation] in any 24-hour period. 30 Texas Admin. Code § 101.211(a). The notice must include a specific list of information. 30 Texas Admin. Code § 101.211(a)(1)(A)–(K). In addition, the owner or operator must create, and retain for five years, a record of such activities by no later than two weeks after the end of each scheduled activity. 30 Texas Admin. Code § 101.211(b). The records must include a specific list of information. 30 Texas Admin. Code § 101.211(b)(1)(A)–(K).
- 212. As part of the federally enforceable Texas SIP, 75 Fed. Reg. 68,989 (Nov. 10, 2010), EPA approved a provision which gives the owner or operator of a source the ability to assert an affirmative defense to enforcement actions brought for:
 - (a) Upset events if the owner or operator proves the existence of eleven specific criteria set forth in the provision (30 Texas Admin. Code § 101.122(b));
 - (b) Unplanned maintenance, startup, or shutdown activities if the owner or operator proves the emissions were from an unplanned maintenance, startup, or shutdown activity and also proves the existence of nine specific criteria set forth in the provision (30 Texas Admin. Code § 101.122(c); or
 - (c) Planned maintenance, startup, or shutdown activities if the owner or operator proves the existence of nine specific conditions set forth in the provision (30 Texas Admin. Code § 101.122(h)).
- 213. On information and belief, at various times from 2006 to the present, SDP operated each of the Chemical Plant and Refinery Flares with an insufficient NHV in the

Combustion Zone Gas and an excessively high steam-to-Vent Gas ratio. This operation increased the likelihood of flame quenching, reduced flare combustion efficiency, and resulted in emissions to the atmosphere of uncombusted hydrogen sulfide, uncombusted and partially-combusted HAPs and hydrocarbons (including VOCs), and carbon monoxide. On information and belief, SDP's operation of its Chemical Plant and Refinery Flares also resulted in excess sulfur dioxide emissions during this time period.

- 214. On information and belief, at various times from 2006 to the present, the flare operation described in Paragraph 213 resulted in HRVOC emissions from one or more of the Chemical Plant and/or Refinery Flares in excess of 1200 pounds per one-hour block period.
- 215. On information and belief, at various times from 2006 to the present, the acts and omissions identified in Paragraph 213 resulted in the exceedance of the reportable quantity of numerous pollutants, including but not limited to, sulfur dioxide, hydrogen sulfide, CO, VOCs, and HRVOCs.
- 216. On information and belief, at various times from 2006 to the present, SDP engaged in the acts or omissions identified in Paragraph 213 during all of the following periods: scheduled or planned maintenance, startup, and/or shutdown; unplanned maintenance, startup, and/or shutdown; and upset events.
- 217. On information and belief, SDP did not satisfy the criteria required to assert an affirmative defense to the emissions resulting from the acts and omissions identified in Paragraph 213.
- 218. On information and belief, at no time did SDP submit to TCEQ any notifications or any initial, final, or annual reports as a result of the emissions resulting from the acts or

omissions identified in Paragraph 213. On information and belief, at no time did SDP create any records relating to the emissions resulting from the acts or omissions identified in Paragraph 213.

219. The acts and omissions identified in Paragraph 213 of this Claim constitute violations 30 Texas Admin Code §§ 101.4, 101.221(a), 115.722(c)(2), 101.201, and 101.211(a) and (b); those provisions of the SDP Chemical Plant and Refinery's Title V permits that require compliance with the SIP provisions identified in this Claim; the prohibitions against violating the terms of a Title V permit, which are found at 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b); and the provisions found in the federally enforceable Texas Title V program that correspond to the prohibitions in 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b).

III. CLEAN AIR ACT: REQUEST FOR RELIEF

220. For the violations asserted in Claims 1 through 10, pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and the Civil Penalties Inflation Act of 1990, SDP is subject to injunctive relief, mitigation of the effects of excess emissions, and civil penalties of up to \$27,500 per day for each violation between January 31, 1997, and March 15, 2004; up to \$32,500 per day for each violation between March 16, 2004, and January 12, 2009; and up to \$37,500 per day for each violation after January 12, 2009.

* * * *

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT ("CERCLA") AND EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT ("EPCRA")

IV. CERCLA/EPCRA: STATUTORY AND REGULATORY BACKGROUND

A. CERCLA Emergency Notification Requirements

221. Section 102(a) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9602(a), requires the Administrator of EPA to

publish a list of substances designated as hazardous substances which when released into the environment may present substantial danger to public health or welfare or the environment, and to promulgate regulations establishing that quantity of any hazardous substance, the release of which shall be required to be reported under Section 103(a) of CERCLA, 42 U.S.C. § 9603(a) ("Reportable Quantity" or "RQ"). The list of RQs of hazardous substances is codified at 40 C.F.R. Part 302.

- 222. Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), as implemented by 40 C.F.R. Part 302, requires, in relevant part, that a person in charge of an onshore facility, as soon as he/she has knowledge of a release (other than a federally permitted release) of a hazardous substance from such facility in quantities equal to or greater than the RQ to immediately notify the National Response Center ("NRC") established under the Section 311(d)(2)(E) of the CWA, 33 U.S.C. § 1321(d)(2)(E), of such release.
- 223. "Onshore facility," under Section 101 of CERCLA, 42 U.S.C. § 9601, is defined as any facility of any kind located in, on, or under, any land or nonnavigable waters within the United States. 42 U.S.C. § 9601(18).
- 224. Section 109(c)(1) of CERCLA, 42 U.S.C. § 9609(c)(1), provides that any person who violates the notice requirements of Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), shall be liable to the United States for civil penalties.

B. EPCRA Emergency Notification Requirements

- 225. The Emergency Planning and Community Right-to-Know Act ("EPCRA") was enacted on October 17, 1986, as Title III of the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499 (1986) (codified at 42 U.S.C. §§ 11001–11050).
- 226. The purpose of EPCRA was and is to provide communities with information on potential chemical hazards within their boundaries and to foster state and local emergency planning efforts to control any accidental releases. Emergency Planning and Community Right-to-Know Programs, Interim Final Rule, 51 Fed. Reg. 41,570 (1986).
- 227. To achieve this end, EPCRA mandates that state emergency response commissions ("SERCs") and local emergency planning committees ("LEPCs") be created.

 42 U.S.C. § 11001(a) and (c). EPCRA establishes a framework of state, regional, and local agencies designed to inform the public about the presence of hazardous and toxic chemicals, and to provide for emergency response in the event of a health-threatening release. 42 U.S.C. § 11001. EPCRA further mandates that industrial and commercial facilities, at which a hazardous chemical is produced, used, or stored, notify SERCs and LEPCs when they have releases of extremely hazardous substances and hazardous substances. 42 U.S.C. § 11004.
- 228. Sections 304(a) and (b) of EPCRA, 42 U.S.C. §§ 11004(a) and (b), requires the owner and operator of a facility at which a hazardous chemical is produced, used, or stored, to immediately notify the SERC and LEPC of certain specified releases of a hazardous or extremely hazardous substance.
- 229. Section 329(4) of EPCRA, 42 U.S.C. § 11049(4), and 40 C.F.R. § 355.20 define "facility" to mean, in relevant part, all buildings, equipment, structures, and other stationary items which are located on a single site and that are owned or operated by the same person.

230. Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3), provides that any person who violates the notice requirements of Section 304 of EPCRA, 42 U.S.C. § 11004, shall be liable to the United States for civil penalties.

C. <u>Federal Enforcement of CERCLA and EPRCA Emergency Notification</u> Requirements

Section 109(c) of CERCLA, 42 U.S.C. § 9609(c), and Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3), authorize EPA to assess a civil penalty of up to \$25,000 per day of violation, and in the case of a second or subsequent violation, \$75,000 per day of violation of CERCLA Section 103, 42 U.S.C. § 9603, or of EPCRA Section 304, 42 U.S.C. § 11004. The Debt Collection Improvement Act, 31 U.S.C. § 3701 et seq., requires EPA to periodically adjust its civil penalties for inflation. On December 31, 1996, February 13, 2004, and December 11, 2008, EPA adopted and revised regulations entitled "Adjustment of Civil Monetary Penalties for Inflation," 40 C.F.R. Part 19, to upwardly adjust the maximum civil penalty under CERCLA and EPCRA. For each violation that occurs between January 31, 1997, and March 15, 2004, inclusive, penalties of up to \$27,500 per day may be assessed; for each violation that occurs between March 16, 2004, and January 12, 2009, inclusive, penalties of up to \$32,500 per day may be assessed; and for each violation that occurs on and after January 13, 2009, penalties of up to \$37,500 per day may be assessed. Additionally, in the case of a second or subsequent violation, for each violation that occurs between January 31, 1997, and March 15, 2004, inclusive, penalties of up to \$82,500 per day may be assessed; for each violation that occurs between March 16, 2004, and January 12, 2009, inclusive, penalties of up to \$97,500 per day may be assessed; and for each violation that occurs on and after January 13, 2009, penalties of up to \$107,500 per day may be assessed. 61 Fed. Reg. 69,360 (Dec. 31, 1996); 69 Fed. Reg. 7121 (Feb. 12, 2004); 73 Fed. Reg. 75,340 (Dec. 11, 2008).

V. CERCLA AND EPCRA EMERGENCY NOTIFICATION CLAIMS

General Allegations

- 232. The SDP Chemical Plant and Refinery are both "onshore facilities" within the meaning of Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), and "facilities" within the meaning of Section 329(4) of EPCRA, 42 U.S.C. § 11049(4). SDP was and is "in charge of" these facilities as that phrase is used in Section 103 of CERCLA, 42 U.S.C. § 9603(a), and was and is the "owner or operator" of these facilities as that phrase is used in Section 304 of EPCRA, 42 U.S.C. § 11004.
- 233. Hazardous substances have been deposited, stored, disposed of, placed, or otherwise come to be located at SDP's Chemical Plant and Refinery, 42 U.S.C. § 9601(9), and hazardous chemicals are produced, used, or stored at SDP's Chemical Plant and Refinery.

 42 U.S.C. § 11004(a).
- 234. Hydrogen sulfide is a "hazardous substance" for purposes of CERCLA and EPRCA emergency notification requirements. 42 U.S.C. § 9601(14); 42 U.S.C. §§ 11004(a),(b); 40 C.F.R. § 302.4 at Table 302.4; 40 C.F.R. Part 355, Appendix A. The reportable quantity of hydrogen sulfide is 100 pounds, as listed in 40 C.F.R. § 302.4, Table 302.4 and 40 C.F.R. Part 355, Appendix A.
- 235. Sulfur dioxide is an "extremely hazardous substance" for purposes of EPCRA emergency notification requirements. 42 U.S.C. §§ 11004(a),(b); 40 C.F.R. Part 355, Appendix A. The reportable quantity of sulfur dioxide is 500 pounds, as listed at 40 C.F.R. Part 355, Appendix A.

CERCLA and EPCRA CLAIM 11

Violation of CERCLA and EPCRA Emergency Notification Requirements

Failure to Notify National Response Center, Applicable SERC, and/or Applicable LEPC of Releases of Sulfur Dioxide and Hydrogen Sulfide in Excess of the Reportable Quantity Based on Insufficient Heating Value in Combustion Zone Gas and Oversteaming of Flares at SDP Chemical Plant and SDP Refinery

- 236. Plaintiff realleges and incorporates by reference Paragraphs 8–11, 194–197, and 232–235 as if fully set forth herein.
- 237. On information and belief, on numerous occasions from 2006 to the present, the acts and omissions alleged in Paragraphs 194–197 resulted in releases of hydrogen sulfide and sulfur dioxide in excess of the reportable quantity of those substances.
- 238. The releases were not "federally permitted releases" as that term is used in Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), and 40 C.F.R. § 302.6, and defined in Section 101(10) of CERCLA, 42 U.S.C. § 9601(10).
- 239. SDP failed to immediately notify the National Response Center of the releases of hydrogen sulfide identified in Paragraph 237 as soon as it had knowledge of the releases within the meaning of Section 103(a) of CERCLA, 42 U.S.C. § 9603(a).
- 240. SDP failed to immediately notify the applicable SERC and LEPC of the releases of hydrogen sulfide and sulfur dioxide identified in Paragraph 237 as soon as it had knowledge of the releases within the meaning of Section 103(a) of CERCLA, 42 U.S.C. § 9603(a).
- 241. The acts and omissions identified in this Claim constitute violations of Section 103(a) of CERCLA, 42 U.S.C. § 9603(a); its implementing regulation at 40 C.F.R. § 302.6(a); Sections 304(a) and (b) of EPCRA, 42 U.S.C. §§ 11004(a) and (b); and their implementing regulation at 40 C.F.R. 355.40(b).

VI. CERCLA/EPCRA: REQUEST FOR RELIEF

242. For the violations asserted in Claim 11, pursuant to Section 109(c)(1) of CERCLA, 42 U.S.C. § 9609(c)(1), Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3), and the Federal Civil Penalties Inflation Adjustment Act of 1990, SDP is subject to civil penalties of up to \$32,500 per day for each violation between March 16, 2004, and January 12, 2009, and up to \$37,500 per day for each violation on and after January 13, 2009. Additionally, in the case of a second or subsequent violation, SDP is subject to a civil penalty of up to \$97,500 per day for each violation between March 16, 2004, and January 12, 2009, and up to \$107,500 per day for each violation on and after January 13, 2009.

* * * *

PRAYER FOR RELIEF

WHEREFORE, based upon the allegations in Paragraphs 1–242 of this Complaint, the United States requests that this Court:

- 1. Permanently enjoin SDP from operating its Chemical Plant and Refinery except in accordance with the CAA and all applicable federal regulations and applicable federally enforceable state regulations;
- 2. Order SDP to operate its Chemical Plant and Refinery in compliance with the CAA statutory and regulatory requirements set forth herein, the applicable SIP requirements, and the PSD, Nonattainment NSR, Minor NSR, and Title V permits applicable to the Chemical Plant and Refinery;
- 3. Order SDP to take other appropriate actions to remedy, mitigate, and offset the harm to public health and the environment caused by the violations of the CAA alleged herein;

- 4. Assess a civil penalty against SDP of up to \$27,500 per day for each violation of the CAA occurring between January 31, 1997, and March 15, 2004; up to \$32,500 for each violation of the CAA, CERCLA, and EPCRA occurring between March 16, 2004, and January 12, 2009; and up to \$37,500 per day for each violation occurring on and after January 13, 2009. Additionally, in the case of a second or subsequent violation of CERCLA and EPCRA, assess a civil penalty against SDP of up to \$97,500 per day for each violation between March 16, 2004, and January 12, 2009, and up to \$107,500 per day for each violation on and after January 13, 2009;
 - 5. Award Plaintiff its costs of this action; and
 - 6. Grant such other relief as the Court deems just and proper.

Respectfully Submitted,

s/ Robert G. Dreher
 ROBERT G. DREHER
 Acting Assistant Attorney General
 Environment and Natural Resources Division
 United States Department of Justice

s/ Robert D. Parrish
ROBERT D. PARRISH
DOJ Attorney by Special Appointment
Environmental Enforcement Section
Environment and Natural Resources Division
Department of Justice
1200 Pennsylvania Ave., N.W.
Room 2109B
Washington, DC 20460-0001
(202) 564-6946 (phone)
parrish.robert@epa.gov

s/ Annette M. Lang
ANNETTE M. LANG
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 514-4213
(202) 616-6584 (fax)
annette.lang@usdoj.gov

KENNETH MAGIDSON United States Attorney Southern District of Texas

By: s/ Keith Edward Wyatt
KEITH EDWARD WYATT
Assistant United States Attorney
Texas Bar No. 22092900
Federal Bar No. 3480
1000 Louisiana St., Suite 2300
Houston, TX 77002
Telephone: (713) 567-9713
Fax: (713) 718-3303